



Northern Great Plains Network

Inventory and Monitoring Monthly Report

June 2005



Vital Signs Selection Meeting: Preparations are moving forward for the Vital Signs selection meeting. The meeting will be September 14 (everyone) and 15 (parks only) at the Ramkota Best Western in Rapid City. Approximately 40 experts have committed to attending. In preparation for the meeting each park was sent a list of about 100 potential Vital Signs to score in terms of significance to their park. Scores have been received from all parks with the exception of Fort Laramie NHS and Mt. Rushmore NMEM. These same Vital Signs will be scored by the experts and partner agencies for ecological significance, feasibility, and value to our partners. These scores—along with a dose of common sense—will be used to establish our official list of Vital Signs.

Field Work: The third and final water sampling run has concluded. The remainder of the project consists of lab work and Dr. Nels Troelstrup developing the aquatic portion of our Vital Signs monitoring plan. The vegetation pilot study is moving forward. Already valuable lessons have been learned in terms of sampling protocol, integration between Fire Effects and the I&M Program, and safety concerns and procedures.

Board Conference Call: The Network Board had a conference call on June 20 (the minutes for all Board and Technical Committee calls and meetings can be found at: <http://www1.nature.nps.gov/im/units/ngpn/Pages/Organization/meetingMinutes.htm>). Highlights of the call are: 1) that Ralph Moore—Superintendent of Scotts Bluff NM—will be Acting Superintendent at Agate Fossil Beds NM and will therefore (likely) be the Board Chairperson for the remainder of FY05; 2) that Dan Licht would draft an official proposed organizational chart for the I&M Program; and; 3) that FY05 funds would be obligated for a Ford Escape 4x4 Hybrid for the I&M Program.

Night Sky: An intriguing potential Vital Sign for the Network to consider is “night sky” monitoring. While at first glance artificial light may seem like only a visitor experience issue, there is a growing body of evidence that *ecological light pollution* (as its sometimes called) can have harmful impacts on native flora and fauna. In a recent article in the scientific journal *Frontiers in Ecology and the Environment* the authors Travis Longcore and Catherine Rich summarize the issue as:

- Ecological light pollution includes chronic or periodically increased illumination, unexpected changes in illumination, and direct glare;
- Animals can experience increased orientation or disorientation from additional illumination and are attracted to or repulsed by glare, which affects foraging, reproduction, communication, and other critical behaviors;
- Artificial light disrupts inter-specific interactions evolved in natural patterns of light and dark, with serious implications for community ecology.

Like all Vital Signs monitoring could be frequent or very infrequent. The article is at: <http://www1.nature.nps.gov/im/units/ngpn/Pages/publicationsArchive.htm>